

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-023116**Date Inspected:** 26-Apr-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Liu Hua Jie**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder(OBG)**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Manoj Prabhune was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector randomly observed the following work in progress:

OBG # TRIAL ASSEMBLY YARD

NDT:

Segment 12 West

This QA Inspector performed Magnetic Particle Testing (MPT) Verification Inspection of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report on this date. The members are identified as Orthotropic Box Girder (OBG) components. The weld designations Verified are as follows.

SA6034-001-003, 015, 019, 023.

SA6034-002-003, 019, 007

Nondestructive testing (NDT) notification No.08942

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DCP:

BAY 11

This QA received ZPMC inspection notification sheet 08936 to perform dimensional inspection of traveler rails identified as 30TR2-001. Dimensional inspections performed on each of these traveler rails include, but is not limited to, overall length, thickness at typical section, Flange width at typical section, rail sweep, Depth typical section. The results of the inspection were recorded on Caltrans (CT) QA form "OBG DCP Hand Measurements Survey: Traveler Rails and submitted to CT QA lead for review.

WELDING:

Segment 13AW

This QA Inspector observed ZPMC qualified welding personnel identified as 037779 perform Shielded Metal Arc Welding (SMAW), weld joint identified as AH3001-035; located On Orthotropic Box Girder (OBG) X4193C to X4208B CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Shen Jian Bo. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Welding Repair Report (WRR) was B-WR20812. ZPMC Quality Control (QC) Mr. Shen Jian Bo was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW 4G (4F)FCM-Repair-1. See attached photo for further details.

Segment 13AW

This QA Inspector observed ZPMC qualified welding personnel identified as 067610 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SP3103-001-067; located On Orthotropic Box Girder (OBG) X4192B to RS3448H CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Shen Jian Bo. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Welding Repair Report (WRR) was B-WR20811. ZPMC Quality Control (QC) Mr. Shen Jian Bo was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW-3G(3F)FCM-Repair-1. See attached photo for further details.

Segment 13AW

This QA Inspector observed ZPMC qualified welding personnel identified as 066443 perform Shielded Metal Arc Welding (SMAW), weld joint identified as FB3178-001-168; located On Orthotropic Box Girder (OBG) FB3178A to X4220C CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Shen Jian Bo. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Welding Repair Report (WRR) was B-WR20819. ZPMC Quality Control (QC) Mr. Shen Jian Bo was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW-4G(4F)FCM-Repair-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with the applicable contract documents.

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Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 15000422372, who represents the Office of Structural Materials for your project.

Inspected By: Prabhune,Manoj

Quality Assurance Inspector

Reviewed By: Peterson,Art

QA Reviewer